### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 27 January 2005 (27.01,2005)

**PCT** 

# (10) International Publication Number WO 2005/008152 A1

(51) International Patent Classification<sup>7</sup>:

F25B 39/02

(21) International Application Number:

PCT/BR2004/000121

(22) International Filing Date: 19 Jul

19 July 2004 (19.07.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PI 0303172-1

21 July 2003 (21.07.2003) BR

- (71) Applicant (for all designated States except US): MULTI-BRÁS S.A. ELETRODOMÉSTICOS [BR/BR]; Avenida das Nações Unidas, 12.995 32° andar, 04578-000 São Paulo SP (BR).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): MARQUES, Marco, Eduardo [BR/BR]; Rua Orestes Guimarães, 421 - ap. 501, 89204-060 Joinville - SC (BR).

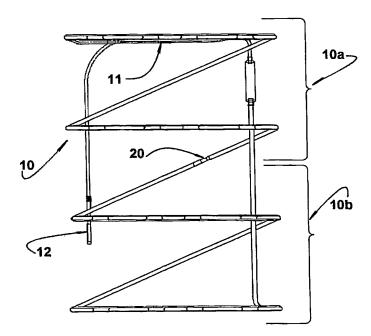
- (74) Agents: ARNAUD, Antonio M.P. et al.; Rua José Bonifácio, 93 9th floor, 01003-901 São Paulo SP (BR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

[Continued on next page]

(54) Title: EVAPORATOR FOR A REFRIGERATION APPLIANCE



(57) Abstract: An evaporator for a refrigeration appliance comprising a tube extension presenting an inlet (11) for the refrigerant fluid in liquid state and an outlet (12) for the refrigerant fluid in gaseous state, said tube extension (10) comprising at least two tube portions (10a, 10b) arranged in series and having different diameters which are dimensioned to guarantee, to the refrigerant fluid flow, a more uniform speed in the interior of the evaporator, without altering the flow rate of this refrigerant fluid between the inlet (11) and the outlet (12) of the tube extension (10).

### 

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.